ABSTRACT OF THE DISCLOSURE

A method and apparatus for increasing the immunity of new generation microprocessors from electrostatic discharge events involve shielding the microprocessors at the die level. A gasket of a lossy material is provided on the substrate upon which the microprocessor is mounted. The gasket surrounds the microprocessor to protect it from electrostatic discharge pulses. A heat spreader is arranged in heat conducting relation with the microprocessor and atop at least a portion of the gasket adjacent the die. The material is a static dissipative material having a volume resistivity of greater than 10² ohm cm and a shielding effectiveness to protect the microprocessor from at least 4 kV of electrostatic discharge pulse at the computer system level in which the microprocessor is to be used.